

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Hind *et al.*

Serial No.: 09/954,951

Filed: September 18, 2001

For: **LOW-LATENCY, INCREMENTAL RENDERING IN A CONTENT
FRAMEWORK**

Confirmation No.: 8532

Group No.: 2176

Examiner: Robert Stevens

Date: November 6, 2006

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

Sir:

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" mailed September 13, 2006, and the "Notice of Panel Decision from Pre-Appeal Brief Review" mailed September 29, 2006.

Real Party In Interest

The real party in interest is assignee International Business Machines Corporation, Armonk, New York.

Related Appeals and Interferences

A Notice Of Appeal To The Board Of Patent Appeals And Interferences and a Reasons In Support Of Applicants' Pre-Appeal Brief Request For Review was filed September 13, 2006 in the present case in response to the Final Office Action mailed June 13, 2006 (hereinafter "Final Action"). Appellants are aware of no appeals or interferences that would be affected by the present appeal.

Status of Claims

Appellants appeal the final rejection of Claims 1-53, which as of the filing date of this Brief remain under consideration. The attached Appendix A presents the claims at issue as rejected in the Final Office Action of June 13, 2006.

Status of Amendments

All amendments in the present case have been entered.

Summary of the Claimed Subject Matter

The present application includes Independent Claims 1, 24, 25, 32, 42, and 46. The claims are method, system and computer program product claims. Independent Claim 1 is directed to methods for incrementally rendering content in a content framework. Such methods may be provided by receiving a request for a portal page from a user agent, where one or more portlets provide content for the portal page. *See* Specification, Page 20, lines 4-7 and Figure 6A (blocks 600 and 610). A response message containing a first document representing results from portlets which have acquired their content is immediately returned. *See* Specification, Page 20, lines 13-15 and Figure 6A (block 640). If the first document does not represent the results of all portlets, a mechanism for delivering an updated document is programmatically generated. *See* Specification, Page 20, line 7 to Page 21, line 2 and Figure 6B (blocks 680, 690, 700, and 710).

Dependent Claim 16 is directed to aspects of the invention where a subsequent request for the portal page is received. The subsequent request is automatically sent responsive to receiving a refresh trigger. A subsequent response comprising the updated document is returned responsive to receiving the subsequent request. The updated document is a subsequent version of the first document, and represents results from portlets which have acquired their content thus far and omits the refresh trigger only if all portlets have now acquired their content. *See* Specification, Page 18, line 16 to Page 19, line 4 and Figure 4.

Dependent Claim 21 is directed to aspects of the invention where one or more of the portlets, which had not acquired their content when the first document was returned in the response message, are detected that have acquired their content. *See* Specification, Page 20, lines 16-18 and Figure 6B (block 690). A subsequent response message containing a revised version of the first document is sent responsive to the detection. The revised version represents results from the one or more portlets and is embedded in a subsequent part of the multipart document. *See* Specification, Page 20, lines 18-20 and Figure 6B (blocks 700 and 710).

Independent Claim 24 is directed to a method of incrementally rendering content in a content framework. The method includes receiving a request for a portal page, where one or more portlets provide content for the portal page. *See* Specification, Page 20, lines 4-5 and Figure 6A (block 600). A response message containing a first document representing results from portlets which have acquired their content is immediately returned. *See* Specification, Page 20, lines 13-15 and Figure 6A (block 640). If the first document does not represent results of all portlets, an updated document is automatically delivered. *See* Specification, Page 20, line 13 to Page 21, line 2 and Figure 6B (blocks 660-710).

Independent Claim 25 is directed to an additional method of incrementally rendering content in a content framework. The method includes receiving a request for a portal page frame, where one or more portlets provide content for the portal page frame. *See* Specification, Page 15, lines 14-17 and Figure 4 (blocks 400 and 410). A response message containing a first mini-document is immediately returned. The first document represents results from portlets which have acquired their content. *See* Specification, Page 18, lines 1-7 and Figure 4 (block 430). A mechanism for delivering an updated mini-document is programmatically generated if the first mini-document does not represent results of all portlets. *See* Specification, Page 15, line 1 to Page 18, line 1 and Figure 4 (blocks 420, 440, and 450).

Independent Claim 32 is directed to a system for incrementally rendering content in a content framework. The system includes means for receiving a request for a portal page, where one or more portlets provide content for the portal page. *See* Specification, Page 20, lines 4-7 and Figure 6A (blocks 600 and 610). The system also includes means for immediately returning a response message containing a first document. The first document represents results from portlets which have acquired their content. *See* Specification, Page 20, lines 13-15 and Figure 6A (block 640). In addition, the system includes means for programmatically generating a mechanism for delivering an updated document if the first document does not represent results of all portlets. *See* Specification, Page 20, line 7 to Page 21, line 2 and Figure 6B (blocks 680, 690, 700, and 710). The structure corresponding to the means recited in Independent Claim 32 is a portal server. *See* Specification, Page 20, lines 3-4.

Dependent Claim 35 is directed towards a system including means for receiving a subsequent request for the portal page. The subsequent request is automatically sent

responsive to receiving a refresh trigger. In addition, the system includes means for returning a subsequent response comprising the updated document responsive to receiving the subsequent request. The updated document is a subsequent version of the first document, and represents results from portlets which have acquired their content thus far and omits the refresh trigger only if all portlets have now acquired their content. *See* Specification, Page 18, line 16 to Page 19, line 4 and Figure 4. The structure corresponding to the means recited in dependent Claim 35 is a portal server. *See* Specification, Page 15, lines 14-15.

Dependent Claim 39 is directed to a system including means for detecting that one or more of the portlets which had not acquired their content when the first document was returned in the response message have now acquired their content. *See* Specification, Page 20, lines 16-18 and Figure 6B (block 690). The system further includes means for sending a subsequent response message containing a revised version of the first document responsive to the means for detecting. The revised version represents results from the one or more portlets and is embedded in a subsequent part of the multipart document. *See* Specification, Page 20, lines 18-20 and Figure 6B (blocks 700 and 710). The structure corresponding to the means recited in dependent Claim 39 is a portal server. *See* Specification, Page 20, lines 3-4.

Independent Claim 42 is directed to a system for incrementally rendering content in a content framework. The system includes means for receiving a request for a portal page frame, wherein one or more portlets provide content for the portal page frame. *See* Specification, Page 15, lines 14-17 and Figure 4 (blocks 400 and 410). The system also includes means for immediately returning a response message containing a first mini-document. The first mini-document represents results from portlets which have acquired their content. *See* Specification, Page 18, lines 1-7 and Figure 4 (block 430). In addition, the system includes means for programmatically generating a mechanism for delivering an updated mini-document if the first mini-document does not represent results of all portlets. *See* Specification, Page 15, line 1 to Page 18, line 1 and Figure 4 (blocks 420, 440, and 450). The structure corresponding to the means recited in Independent Claim 42 is a portal server. *See* Specification, Page 15, lines 14-15.

Independent Claim 46 is directed to a computer program product corresponding to the method of Claim 1.

Dependent Claim 49 is directed to a computer program product corresponding to the method of Claim 16.

Dependent Claim 52 is directed to a computer program product corresponding to the method of Claim 21.

Grounds of Rejection to Be Reviewed on Appeal

1. Claims 1-7, 10-16, 24-29, 32-35, 42-44 and 46-49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent Publication No.

2001/0034771 to Hutsch et al. (hereinafter "Hutsch") in view of the publication *HTML's META-tag: HTTP-EQUIV* by Alan Richmond (hereinafter "Richmond").

2. Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond in further view of United States Patent No. 6,453,361 to Morris (hereinafter "Morris").

3. Claims 17-22, 30-31, 34, 36-40, 45 and 50-53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond in further view of the publication *SAMS Teach Yourself Web Publishing with HTML 4 in 21 Days, 2nd Edition* by Laura LeMay (hereinafter "LeMay").

4. Claims 23 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond in further view of United States Patent Publication No. 2002/0026500 to Kanefsky *et al.* (hereinafter "Kanefsky").

Argument

I. Introduction

The pending claims are rejected as obvious under 35 U.S.C. § 103. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the **desirability** of the combination. MPEP §2143.01, citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). As emphasized by the Court of Appeals for the Federal Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be **clear and particular**,

and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). The Court of Appeals for the Federal Circuit has further stated that, to support combining or modifying references, there must be **particular** evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

Appellants respectfully submit that the pending claims are patentable over the cited references because the combination of the cited references fails to disclose or suggest all of the recitations of the pending claims, as will be discussed in detail below.

II. The Rejection of Claims 1-7, 10-16, 24-29, 32-35, 42-44 and 46-49

A. Independent Claims 1, 24, 25, 32, 42, and 46 Are Patentable

As stated above, Independent Claims 1, 24, 25, 32, 42, and 46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond. Appellants respectfully submit that many of the recitations of these claims are neither disclosed nor suggested by the cited combination. For example, Claim 1 recites:

1. A method of incrementally rendering content in a content framework:
receiving a request for a portal page, wherein one or more portlets provide content for the portal page;
immediately returning a response message containing a first document, the first document representing results from portlets which have acquired their content; and
programmatically generating a mechanism for delivering an updated document if the first document does not represent results of all portlets. (*Emphasis added*).

Appellants respectfully submit that at least the highlighted recitations of Claim 1 are neither disclosed nor suggested by the cited combination.

The Final Action asserts that Hutsch discloses a network portal system comprising portlets and requests therefor in Figure 3A. *See* Final Action, Page 3. As illustrated in Hutsch, the portal system includes a portlet manager **321** that interacts with a plurality of portlets **324**. *See* Hutsch, Figure 3A. More particularly, with reference to Figure 3A, Hutsch describes that "[w]eb top manager **111** includes a web server **320**. Web server **320** includes a

desktop servlet **322** coupled to a presentation and logic system **323** that provides a presentation and logic service, and optionally, a portlet manager **321** that interacts with a plurality of portlets **324**". Hutsch, Paragraph 0124. In further describing the web top manager **111**, Hutsch states:

[0100] Hence, upon retrieving the requested content using the handle provided by UCB **113**, **web-top manager 111 loads, for example, a template and fills in all user specific content in the template using the retrieved content. The completed template is transmitted to client device 102i for display.** Alternatively, web-top manager **111** retrieves a stylesheet and uses the stylesheet to transform the content into a format that can be displayed on client device **102i**.

Hutsch, Paragraph 0100 (*emphasis added*). Accordingly, Hutsch discusses loading a template with content, and then providing the *completed* template to the client device. In other words, the *completed* template is transmitted to the client device *after* all of the information is gathered.

In contrast, Claim 1 recites receiving a request for a portal page and *immediately returning* a first document representing results from portlets which have acquired their content. Thus, a *partially-completed* document may be returned *immediately, i.e., before* all the portlet information is gathered. *See*, for example, Specification, Page 21, lines 3-9.

In response to this argument, the Final Action asserts that the recitations of immediately returning a document "before all the information is gathered" does not appear in Claim 1. *See* Final Action, page 17. However, Appellants wish to note that a patentee is free to be his own lexicographer, and that the claims must be interpreted in the context of the claims and drawings. *See* MPEP, §2111.01. As further provided by the MPEP:

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).

MPEP, §2111. As such, when the recitations of Claim 1 are given their broadest reasonable interpretation in light of the present specification, Appellants submit that the recitations of "immediately returning a response message" may include returning the response *before* all of the portlets have acquired their content.

However, as noted above, Hutsch describes transmitting a *completed* template *after* all of the information is gathered. Accordingly, Appellants submit that the cited portions of Hutsch do not disclose or suggest "immediately returning a response message", as recited by

Claim 1. Nor does the Final Action rely on Richmond as disclosing or suggesting these recitations. Thus, Appellants submit that Claim 1 is patentable over the combination of Hutsch and Richmond for at least these reasons.

Furthermore, Claim 1 recites "programmatically generating a mechanism for delivering an updated document if the first document does not represent results of all portlets". The Final Action concedes that Hutsch fails to disclose or suggest these recitations, but argues that Richmond provides the missing teachings. *See* Final Action, Page 3. Appellants respectfully disagree. The cited portion of Richmond discusses a META tag "that can be used by caches to determine **when** to fetch a fresh copy of the associated document." Richmond, Page 1 (*emphasis added*). In particular, Richmond notes that the document may be updated when the stated time of Tuesday, August 20, 1996 expires. *See* Richmond, Page 1. However, nowhere does Richmond disclose or suggest updating a document "**if the first document does not represent results of all portlets**", as recited by Claim 1.

In response to this argument, the Final Action asserts that the "if" clause of Claim 1 "states an optional condition", and therefore, "it is not necessary that the reference teach such a limitation". *See* Final Action, Pages 3 and 17. However, Appellants respectfully refer to the following sections of the MPEP for guidance in interpreting claim language:

During examination, the claims must be interpreted **as broadly as their terms reasonably allow**. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004).

MPEP, §2111.01. In addition, with regard to computer-related inventions, the MPEP states:

The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, **the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope**. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

MPEP, §2106. The MPEP further provides:

Finally, when evaluating the scope of a claim, **every limitation** in the claim must be considered. Office personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation. **Instead, the claim as a whole must be considered**. *See, e.g., Diamond v. Diehr*, 450 U.S. at 188-89, 209 USPQ at 9.

MPEP, §2106. Accordingly, Appellants submit that, when considered as a whole based on the intended meaning of the claim language, programmatically generating a mechanism for

delivering an updated document "if the first document does not represent results of all portlets" is a positive recitation that *must* be performed when the condition exists where the first document does not represent the results of all of the portlets. In addition, the "if" clause implies that it is determined whether the document represents the results of all portlets, and if it does not, a mechanism for generating an updated document is programmatically generated. Thus, Appellants respectfully submit that the "if" clause discussed in the Final Action does not render the subject of that clause as optional when Claim 1 is considered as a whole and is given its broadest reasonable interpretation in light of the specification. As such, Richmond does not disclose or suggest "programmatically generating a mechanism for delivering an updated document if the first document does not represent results of all portlets", as recited by Claim 1.

Accordingly, Appellants submit that none of the cited references, either alone or in combination disclose or suggest the "immediately returning" and "programmatically generating" recitations of Claim 1. Thus, Claim 1 is patentable over the combination of the cited references for at least the above reasons.

Furthermore, Appellants submit that there is no motivation or suggestion to combine the cited references as suggested in the Office Action. For example, as its motivation to combine the teachings of Richmond and Hutsch, the Final Action states:

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Richmond for the benefit of Hutsch, because to do so would allow a programmer to automatically refresh a document as taught by Richmond in p. 1, middle of page discussing the HTTP-EQUIV = "Expires" attribute. These references were all applicable to the same field of endeavor, i.e., web pages/service design.

Final Action, pages 3-4. Appellants wish to note that, as affirmed by the Court of Appeals for the Federal Circuit in *In re Sang-su Lee*, a factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority. *See In re Sang-su Lee*, 277 F.3d 1338 (Fed. Cir. 2002). It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 312-13 (Fed. Cir. 1983).

Appellants respectfully submit that the stated motivation for combination provided by the Final Action appears to be based on subjective belief, as the Final Action does not

provide any evidence as *why* one of skill in the art would be motivated to modify the teachings of Hutsch to automatically refresh a document as taught by Richmond. Rather, the Final Action states that the combination would be obvious simply because the references "were all applicable to the same field of endeavor". Final Action, Page 4.

In response to this argument, the Final Action asserts that "the motivation came from the references themselves". Final Action, Page 17. However, the Final Action does not point to any specific portions of the cited references that would induce one of skill in the art to combine the cited references in the manner described. Moreover, the Final Action asserts that "claim 6 [of the present application] is evidence that Richmond is not subjectively applied, because this claim explicitly recited the subject matter taught by the Richmond reference". Final Action, Page 17. However, Appellants respectfully submit that, by citing Claim 6 of the *present application* as evidence that Richmond is not subjectively applied, the Final Action resorts to hindsight reasoning based on Appellants' disclosure. In other words, the Final Action appears to gain its alleged impetus or suggestion to combine the cited references simply by using the Appellants' teachings against its teacher, which, as noted above, is an inappropriate basis for combining references. Accordingly, Appellants submit that the Final Action provides no evidence as to why a skilled artisan would be motivated to combine these references without using the teachings of Appellants' disclosure as a guide. Thus, the stated motivation provided by the Final Action is inadequate to support the combination of the cited references.

Furthermore, Appellants note that, even if Hutsch and Richmond could be properly combined, the combination of Hutsch and Richmond would teach loading a template with content to provide the *completed* template to the client device, and refreshing the *completed* template upon expiration of a predetermined time. As such, the combination of Hutsch and Richmond does not disclose or suggest updating a *partially-completed* document that "does not represent results of all portlets", as recited by Claim 1. Accordingly, even if combined, the cited references fail to disclose or suggest the recitations of Claim 1.

Thus, Appellants respectfully submit that Independent Claim 1 is patentable over the cited combination for at least these reasons. Claims 32 and 46 contain system and computer program product recitations corresponding to the method of Claim 1, and are thus patentable for at least similar reasons. In addition, independent Claim 24 similarly recites "immediately returning a response message containing a first document, the first document representing

results from portlets which have acquired their content" and "automatically delivering an updated document if the first document does not represent results of all portlets", and as such, is patentable for at least similar reasons. Also, independent Claim 25 recites "immediately returning a response message containing a first mini-document, the first document representing results from portlets which have acquired their content" and "programmatically generating a mechanism for delivering an updated mini-document if the first mini-document does not represent results of all portlets", and is thus also patentable for at least similar reasons. Claim 42 contains system recitations corresponding to the method of Claim 25, and is thus patentable for at least similar reasons. Furthermore, the dependent claims are patentable at least per the patentability of the independent base claims from which they depend.

Accordingly, Appellants submit that Independent Claims 1, 24, 25, 32, 42, and 46 and the claims that depend therefrom are in condition for allowance, which is respectfully requested in due course. For at least these reasons, Appellants request that the rejection of Claims 1-53 be reversed.

B. Many of the Dependent Claims are Separately Patentable

As discussed above, all of the dependent claims are patentable at least per the patentability of the independent base claims from which they depend. In addition, many of the dependent claims are also separately patentable.

For example, Claim 16 recites:

16. The method according to Claim 2, further comprising:
receiving a subsequent request for the portal page, the subsequent request having been automatically sent responsive to receiving the refresh trigger; and
returning a subsequent response comprising the updated document, responsive to receiving the subsequent request, **the updated document being a subsequent version of the first document and representing results from portlets which have acquired their content thus far and which omits the refresh trigger only if all portlets have now acquired their content.**

Claims 35 and 49 contain corresponding system and computer program product recitations, respectively. The Final Action concedes that Hutsch does not specifically disclose the recitations of Claim 16, but points to Richmond as providing the missing teachings. See Final Action, Page 7. In particular, the Final Action asserts that the cited portion of Richmond discusses updating a web page using a META tag to indicate invocation of a URL

after 90 seconds to trigger a refresh. *See* Final Action, Page 7 and Richmond, Page 2. However, nowhere does Richmond disclose or suggest omitting the refresh trigger only if all portlets have acquired their content. Accordingly, Appellants submit that Claims 16, 35, and 49 are separately patentable over the cited references for at least these additional reasons. Thus, Appellants respectfully request that the rejections of Claims 16, 35, and 49 be reversed.

III. The Rejection of Claims 8 and 9

As noted above, dependent Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond in further view of Morris. However, Appellants respectfully submit that dependent Claims 8 and 9 are patentable at least per the patentability of independent Claim 1 from which they depend. Accordingly, Appellants respectfully request that the rejections of dependent Claim 8 and 9 be reversed.

IV. The Rejection of Claims 17-22, 30-31, 34, 36-40, 45 and 50-53

As stated above, dependent Claims 17-22, 30-31, 34, 36-40, 45 and 50-53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond in further view of LeMay. However, Appellants respectfully submit that dependent Claims 17-22, 30-31, 34, 36-40, 45 and 50-53 are patentable at least per the patentability of the independent base claims from which they depend. In addition, many of the dependent claims are also separately patentable.

For example, Claim 21 recites:

21. The method according to Claim 17, further comprising:
detecting that one or more of the portlets which had not acquired their content when the first document was returned in the response message have now acquired their content; and
sending, responsive to detecting, a subsequent response message containing a revised version of the first document, the revised version representing results from the one or more portlets and being embedded in a subsequent part of the multipart document.

Claims 39 and 52 contain corresponding system and computer program product recitations, respectively. The Final Action concedes that Hutsch does not specifically disclose the recitations of Claim 21, but points to Richmond as providing the missing teachings. *See* Final Action, Page 14. In particular, the Final Action asserts that the cited portion of Richmond discusses updating a web page using a META tag to indicate invocation of a URL

after 90 seconds to trigger a web page update or refresh. *See* Final Action, Page 14 and Richmond, Page 2. However, nowhere does Richmond disclose or suggest detecting that one or more of the portlets, which had not acquired their content when the first document was returned, have now acquired their content. Nor does the Final Action point to LeMay as disclosing or suggesting these recitations. Accordingly, Appellants submit that Claims 21, 39, and 52 are separately patentable over the cited references for at least these additional reasons. Thus, Appellants respectfully request that the rejections of Claims 21, 39, and 52 be reversed.

For at least the foregoing reasons, Appellants respectfully submit that dependent Claims 17-22, 30-31, 34, 36-40, 45 and 50-53 are patentable over the cited references. Accordingly, Appellants respectfully request reversal of the rejections with respect to these dependent claims for at least these additional reasons.

V. The Rejection of Claims 23 and 41

As noted above, dependent Claims 23 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutsch in view of Richmond in further view of Kanefsky. However, Appellants respectfully submit that dependent Claims 23 and 41 are patentable at least per the patentability of independent Claims 1 and 32 from which they depend. Accordingly, Appellants respectfully request that the rejections of dependent Claim 23 and 41 be reversed.

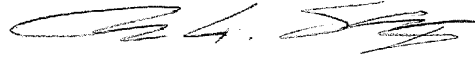
VI. Conclusion

In light of the above, Appellants request reversal of the rejections of the claims, allowance of the claims and passing of the application to issue.

It is not believed that an extension of time and/or additional fee(s) are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned for under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to Deposit Account No. 09-0657.

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Respectfully submitted,

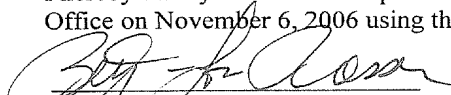


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Betty-Lou Rosser
Date of Signature: November 6, 2006

APPENDIX A

1. (Previously Presented) A method of incrementally rendering content in a content framework, comprising:
 - receiving a request for a portal page, wherein one or more portlets provide content for the portal page;
 - immediately returning a response message containing a first document, the first document representing results from portlets which have acquired their content; and
 - programmatically generating a mechanism for delivering an updated document if the first document does not represent results of all portlets.
2. (Original) The method according to Claim 1, wherein the programmatically generated mechanism comprises inclusion of a refresh trigger in the response message.
3. (Original) The method according to Claim 2, wherein the refresh trigger is a refresh header of the response message.
4. (Original) The method according to Claim 2, wherein the refresh trigger is encoded using syntax of a markup language.
5. (Original) The method according to Claim 4, wherein the markup language is HTML ("Hypertext Markup Language").
6. (Original) The method according to Claim 5, wherein the syntax comprises a "META" tag using an "HTTP-EQUIV" attribute syntax.
7. (Original) The method according to Claim 4, wherein the markup language is WML ("Wireless Markup Language").

8. (Original) The method according to Claim 4, wherein the markup language is i-mode format.

9. (Original) The method according to Claim 4, wherein the markup language is HDML ("Handheld Device Markup Language").

10. (Original) The method according to Claim 2, wherein a value on the refresh trigger specifies a time before which the programmatically generated mechanism does not execute.

11. (Original) The method according to Claim 2, wherein a value on the refresh trigger is computed as a time after which a sender of the portal page request automatically invokes the delivery of the updated document.

12. (Original) The method according to Claim 2, wherein a value on the refresh trigger is computed as a latest predicted completion time of a final one of the portlets which have not yet acquired their content.

13. (Original) The method according to Claim 12, wherein the value is determined by weighting actual fetch times of the portlets which have not yet acquired their content.

14. (Original) The method according to Claim 12, wherein the value is determined by adding a constant value to a largest of weighted actual fetch times of the portlets which have not yet acquired their content.

15. (Previously Presented) The method according to Claim 2, further comprising:
receiving the response message by a client from which the request for the portal page was sent;
rendering, by the client, the first document from the received response message; and
automatically sending a subsequent request for the portal page after waiting for a time specified by a value of the refresh trigger.

16. (Previously Presented) The method according to Claim 2, further comprising:
receiving a subsequent request for the portal page, the subsequent request having been automatically sent responsive to receiving the refresh trigger; and
returning a subsequent response comprising the updated document, responsive to receiving the subsequent request, the updated document being a subsequent version of the first document and representing results from portlets which have acquired their content thus far and which omits the refresh trigger only if all portlets have now acquired their content.

17. (Original) The method according to Claim 1, wherein the programmatically generated mechanism comprises creating a multipart document, and wherein the first document is embedded in a first of the parts of the multipart document.

18. (Original) The method according to Claim 17, wherein the first of the parts is preceded by a boundary string used to delimit parts of the multipart document.

19. (Original) The method according to Claim 18, wherein the first of the parts is followed by a terminating boundary string if the first document represents results from all portlets.

20. (Previously Presented) The method according to Claim 17, further comprising:
receiving the response message by a client from which the request for the portal page was sent;
rendering, by the client, the first document from the first of the parts of the multipart document;
receiving, by the client, subsequent parts of the multipart document, each of the subsequent parts comprising a revised version of the first document; and
rendering, by the client, the subsequent parts of the multipart document.

21. (Previously Presented) The method according to Claim 17, further comprising:
detecting that one or more of the portlets which had not acquired their content when the first document was returned in the response message have now acquired their content; and

sending, responsive to detecting, a subsequent response message containing a revised version of the first document, the revised version representing results from the one or more portlets and being embedded in a subsequent part of the multipart document.

22. (Original) The method according to Claim 21, wherein the subsequent part is preceded by a boundary string used to delimit parts of the multipart document and is followed by a terminating boundary string if the revised version represents results from all portlets.

23. (Original) The method according to Claim 1, wherein the programmatically generated mechanism comprises programmatically inserting a hyperlink into the first document, wherein the inserted hyperlink can be used to explicitly request delivery of the updated document.

24. (Previously Presented) A method of incrementally rendering content in a content framework, comprising:

receiving a request for a portal page, wherein one or more portlets provide content for the portal page;

immediately returning a response message containing a first document, the first document representing results from portlets which have acquired their content; and

automatically delivering an updated document if the first document does not represent results of all portlets.

25. (Previously Presented) A method of incrementally rendering content in a content framework, comprising:

receiving a request for a portal page frame, wherein one or more portlets provide content for the portal page frame;

immediately returning a response message containing a first mini-document, the first document representing results from portlets which have acquired their content; and

programmatically generating a mechanism for delivering an updated mini-document if the first mini-document does not represent results of all portlets.

26. (Original) The method according to Claim 25, wherein the programmatically generated mechanism comprises inclusion of a refresh header in the response message.

27. (Original) The method according to Claim 25, wherein the programmatically generated mechanism comprises inclusion of an syntax element in the response header, wherein the syntax element is encoded using a markup language.

28. (Original) The method according to Claim 27, wherein the markup language is HTML ("Hypertext Markup Language") and the syntax element comprises a "META" tag using an "HTTP-EQUIV" attribute syntax.

29. (Original) The method according to Claim 26, wherein a value on the refresh header is computed as a time after which a sender of the portal page frame request automatically invokes the delivery of the updated mini-document.

30. (Original) The method according to Claim 25, wherein the programmatically generated mechanism comprises creating a multipart document, and wherein the first mini-document is embedded in a first of the parts of the multipart document.

31. (Original) The method according to Claim 30, wherein the first of the parts is preceded by a boundary string used to delimit parts of the multipart document, and is followed by a terminating boundary string if the first mini-document represents results from all portlets.

32. (Original) A system for incrementally rendering content in a content framework, comprising:

means for receiving a request for a portal page, wherein one or more portlets provide content for the portal page;

means for immediately returning a response message containing a first document, the first document representing results from portlets which have acquired their content; and

means for programmatically generating a mechanism for delivering an updated document if the first document does not represent results of all portlets.

33. (Original) The system according to Claim 32, wherein the programmatically generated mechanism comprises inclusion of a refresh trigger in the response message.

34. (Original) The system according to Claim 32, further comprising:
means for receiving the response message by a client from which the request for the portal page was sent;
means for rendering, by the client, the first document from the received response message; and
means for automatically sending a subsequent request for the portal page after waiting for a time specified by a value of the refresh trigger.

35. (Original) The system according to Claim 32, further comprising:
means for receiving a subsequent request for the portal page, the subsequent request having been automatically sent responsive to receiving the refresh trigger; and
means for returning a subsequent response comprising the updated document, responsive to receiving the subsequent request, the updated document being a subsequent version of the first document and representing results from portlets which have acquired their content thus far and which omits the refresh trigger only if all portlets have now acquired their content.

36. (Original) The system according to Claim 32, wherein the programmatically generated mechanism comprises creating a multipart document, and wherein the first document is embedded in a first of the parts of the multipart document.

37. (Original) The system according to Claim 36, wherein the first of the parts is preceded by a boundary string used to delimit parts of the multipart document, and is followed by a terminating boundary string only if the first document represents results from all portlets.

38. (Original) The system according to Claim 36, further comprising:

means for receiving the response message by a client from which the request for the portal page was sent;

means for rendering, by the client, the first document from the first of the parts of the multipart document;

means for receiving, by the client, subsequent parts of the multipart document, each of the subsequent parts comprising a revised version of the first document; and

means for rendering, by the client, the subsequent parts of the multipart document.

39. (Original) The system according to Claim 36, further comprising:

means for detecting that one or more of the portlets which had not acquired their content when the first document was returned in the response message have now acquired their content; and

means for sending, responsive to the means for detecting, a subsequent response message containing a revised version of the first document, the revised version representing results from the one or more portlets and being embedded in a subsequent part of the multipart document.

40. (Original) The system according to Claim 39, wherein the subsequent part is preceded by a boundary string used to delimit parts of the multipart document and is followed by a terminating boundary string if the revised version represents results from all portlets.

41. (Original) The system according to Claim 32, wherein the programmatically generated mechanism comprises programmatically inserting a hyperlink into the first document, wherein the inserted hyperlink can be used to explicitly request delivery of the updated document.

42. (Original) A system for incrementally rendering content in a content framework, comprising:

means for receiving a request for a portal page frame, wherein one or more portlets provide content for the portal page frame;

means for immediately returning a response message containing a first mini-document, the first document representing results from portlets which have acquired their content; and

means for programmatically generating a mechanism for delivering an updated mini-document if the first mini-document does not represent results of all portlets.

43. (Original) The system according to Claim 42, wherein the programmatically generated mechanism comprises inclusion of a refresh header in the response message.

44. (Previously Presented) The system according to Claim 42, wherein the programmatically generated mechanism comprises inclusion of an syntax element in the response header, wherein the syntax element is encoded using a markup language.

45. (Original) The system according to Claim 42, wherein the programmatically generated mechanism comprises creating a multipart document, and wherein the first mini-document is embedded in a first of the parts of the multipart document.

46. (Previously Presented) A computer program product incrementally rendering content in a content framework, the computer program product embodied on one or more computer-usable media and comprising:

computer readable program code configured to receive a request for a portal page, wherein one or more portlets provide content for the portal page;

computer readable program code configured to immediately return a response message containing a first document, the first document representing results from portlets which have acquired their content; and

computer readable program code configured to programmatically generate a mechanism for delivering an updated document if the first document does not represent results of all portlets.

47. (Original) The computer program product according to Claim 46, wherein the programmatically generated mechanism comprises inclusion of a refresh trigger in the response message.

48. (Previously Presented) The computer program product according to Claim 46, further comprising:

computer readable program code configured to receive the response message by a client from which the request for the portal page was sent;

computer readable program code configured to render, by the client, the first document from the received response message; and

computer readable program code configured to automatically send a subsequent request for the portal page after waiting for a time specified by a value of the refresh trigger.

49. (Previously Presented) The computer program product according to Claim 46, further comprising:

computer readable program code configured to receive a subsequent request for the portal page, the subsequent request having been automatically sent responsive to receiving the refresh trigger; and

computer readable program code configured to return a subsequent response comprising the updated document, responsive to receiving the subsequent request, the updated document being a subsequent version of the first document and representing results from portlets which have acquired their content thus far and which omits the refresh trigger only if all portlets have now acquired their content.

50. (Original) The computer program product according to Claim 46, wherein:
the programmatically generated mechanism comprises creating a multipart document;
the first document is embedded in a first of the parts of the multipart document;
the first of the parts is preceded by a boundary string used to delimit parts of the multipart document; and

the first of the parts is followed by a terminating boundary string only if the first document represents results from all portlets.

51. (Previously Presented) The computer program product according to Claim 50, further comprising:

computer readable program code configured to receive the response message by a client from which the request for the portal page was sent;

computer readable program code configured to render, by the client, the first document from the first of the parts of the multipart document;

computer readable program code configured to receive, by the client, subsequent parts of the multipart document, each of the subsequent parts comprising a revised version of the first document; and

computer readable program code configured to render, by the client, the subsequent parts of the multipart document.

52. (Previously Presented) The computer program product according to Claim 50, further comprising:

computer readable program code configured to detect that one or more of the portlets which had not acquired their content when the first document was returned in the response message have now acquired their content; and

computer readable program code configured to send, responsive to the computer readable program code configured to detect, a subsequent response message containing a revised version of the first document, the revised version representing results from the one or more portlets and being embedded in a subsequent part of the multipart document.

53. (Original) The computer program product according to Claim 52, wherein the subsequent part is preceded by a boundary string used to delimit parts of the multipart document and is followed by a terminating boundary string only if the revised version represents results from all portlets.

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APPENDIX B – EVIDENCE APPENDIX
(NONE)

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APPENDIX C – RELATED PROCEEDINGS
(NONE)